

# GREY IRON FOUNDRY JABALPUR MP

## UNIT PROFILE

Grey Iron Foundry ( GIF ), Jabalpur was set up for production of automobile castings of Grey Iron & Malleable Iron required for Shaktiman & Nissan Vehicles produced at Vehicle Factory, Jabalpur & Vijayanta Tanks produced at Heavy Vehicles Factory, Avadi. The factory was commissioned in technical collaboration with SKODA, Czechoslovakia under an agreement on economic co-operation with Govt. of India & Govt. of Czechoslovakia. The production commenced from July 1976. Due to phasing out of Nissan, Shaktiman vehicles & Vijayanta Tank, GIF has entered Civil Trade market & diversified its production towards Ammunition items & Ammunition Boxes, in addition to supplying castings to VFJ for LPTA & Stallion vehicles.

- **LOCATION**

Grey Iron Foundry is located adjacent to Vehicle Factory, Jabalpur on eastern side of main Jabalpur – Allahabad railway line at a distance of 9 Km. from Jabalpur Railway Station.



- **AREA**

Construction of factory was started in May 1970 on an area of 21.99 Hectare. The total covered area is 45,590 Sq. Mt.

- **CAPITAL OUTLAY**

- **COST OF PROJECT**

( a )Building	=	714.09 Lakhs
( b )Plant & Machinery	=	931.48 Lakhs
( c )Land	=	43.11 Lakhs
<b>Total</b>	=	<b>1688.68 Lakhs</b>

- **PRODUCT RANGE**

- a) Product range comprises of Grey Iron Castings of four grades i.e. FG – 150, FG – 200, FG – 260, FG – 350 to IS : 210 – 1993 & Spheroidal Iron of grade 400/12, 450/10, 500/7, 800/2, 900/2 to IS : 1865 1991, Steel Castings. Weight of individual castings varies between 350 gms to 285 Kgs..
- b) GIF has taken up the development of castings for Ammunition items of 100/120 Kg., 250 Kg, 450 Kg, and 1000 lb. Bomb Body etc. and Ammunition Boxes of C43A, C44A, C48A, C51A, C53A, H2A, H5A, Carrier 6AL& Carrier 13AL. etc..

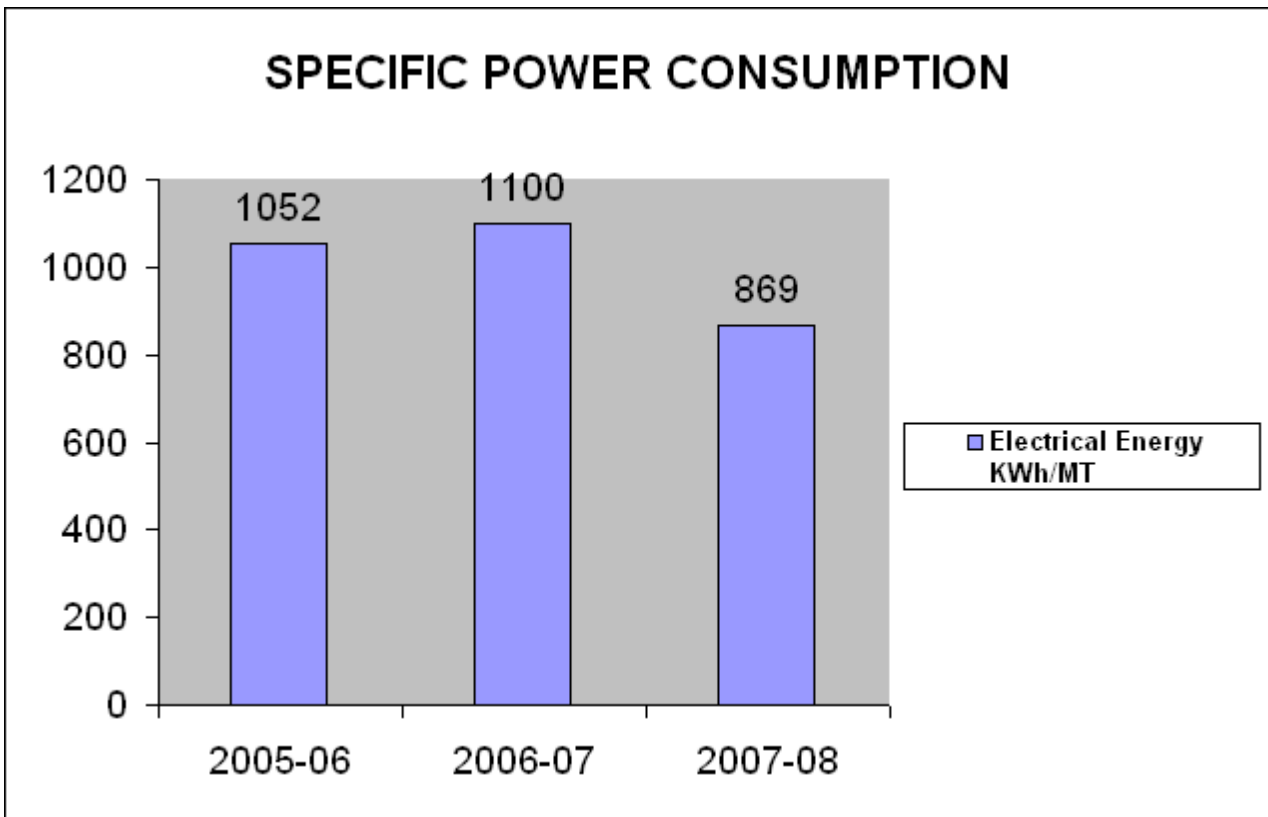
- **ORGANISATIONAL STRUCTURE**

General Manager, who is responsible to Chairman, Ordnance Factory Board through Member / WV & E, Ordnance Factory Board, Kolkata, heads this factory.53 Gazetted Officers (A&B) including One Medical Officer, One Security Officer, One DLWC, One Asstt. Controller of Defence Accounts & Two Account Officers to assist the General Manager.

**GREY IRON FOUNDRY JABALPUR WAS THE WINNER OF THE “NATIONAL ENERGY CONSERVATION AWARD - 2005-06” FIRST PRIZE IN THE FOUNDRY SECTOR**

### ENERGY CONSUMPTION DETAIL

DESCRIPTION	UNIT	2005-06	2006-07	2007-08
Electrical Energy	KWh/MT	1052	1100	869
Total Manufacturing Cost	Rs. Lakhs	4309	2870	6863
Total Energy Bill	Rs. Lakhs	617	543	549.7
<b>Energy as %age of Total Cost of Production</b>	<b>%</b>	<b>8.2</b>	<b>15.52</b>	<b>8.34</b>



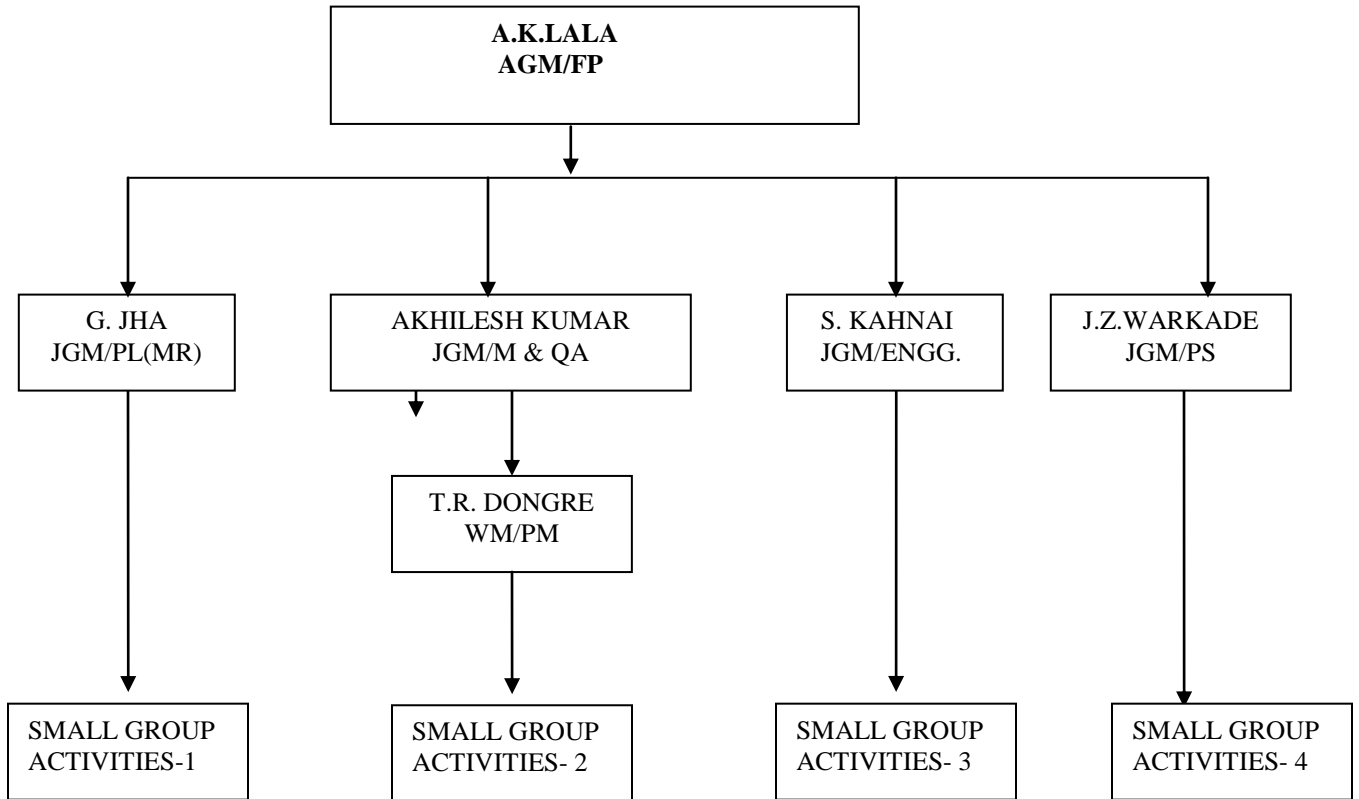
## **ENERGY MANAGEMENT POLICY**

**“Grey Iron Foundry, Jabalpur is committed to conserve various forms of Energy in a cost effective manner for all its products, related operation & ensuring that production quality, quantity, environment, safety, health of people is maintained.”**

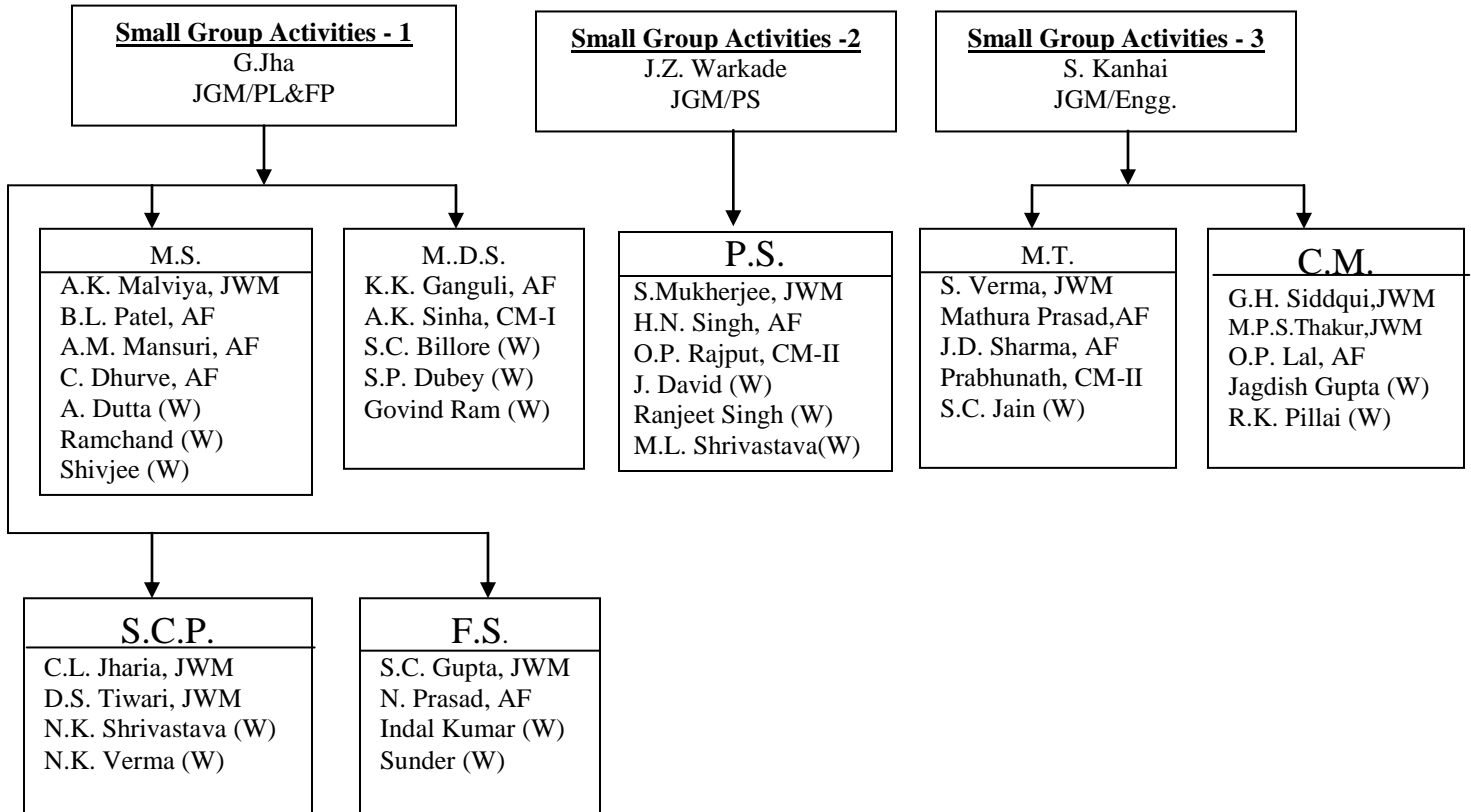
**To meet above goals we will strive for :-**

- To reduce specific energy consumption in all our operations and activities.
- To adopt energy efficient technologies/equipment for all new projects.
- To replace old and outdated energy inefficient technology/equipment continually.
- Conducting energy conservation studies including audits by engaging external specialists.
- Creating awareness among employees through campaigns, publicity about need for energy conservation.
- Recognising the efforts of employees in energy conservation initiatives and suitably rewarding them.
- To control energy consumption by periodic review and improving our processes by motivation & training practices.
- To conduct regular management review to ensure continual improvement and achieve of our goal.
- Reducing specific energy consumption by a minimum of 5% from the present level by the year 2010.

## ENERGY CONSERVATION CELL STRUCTURE

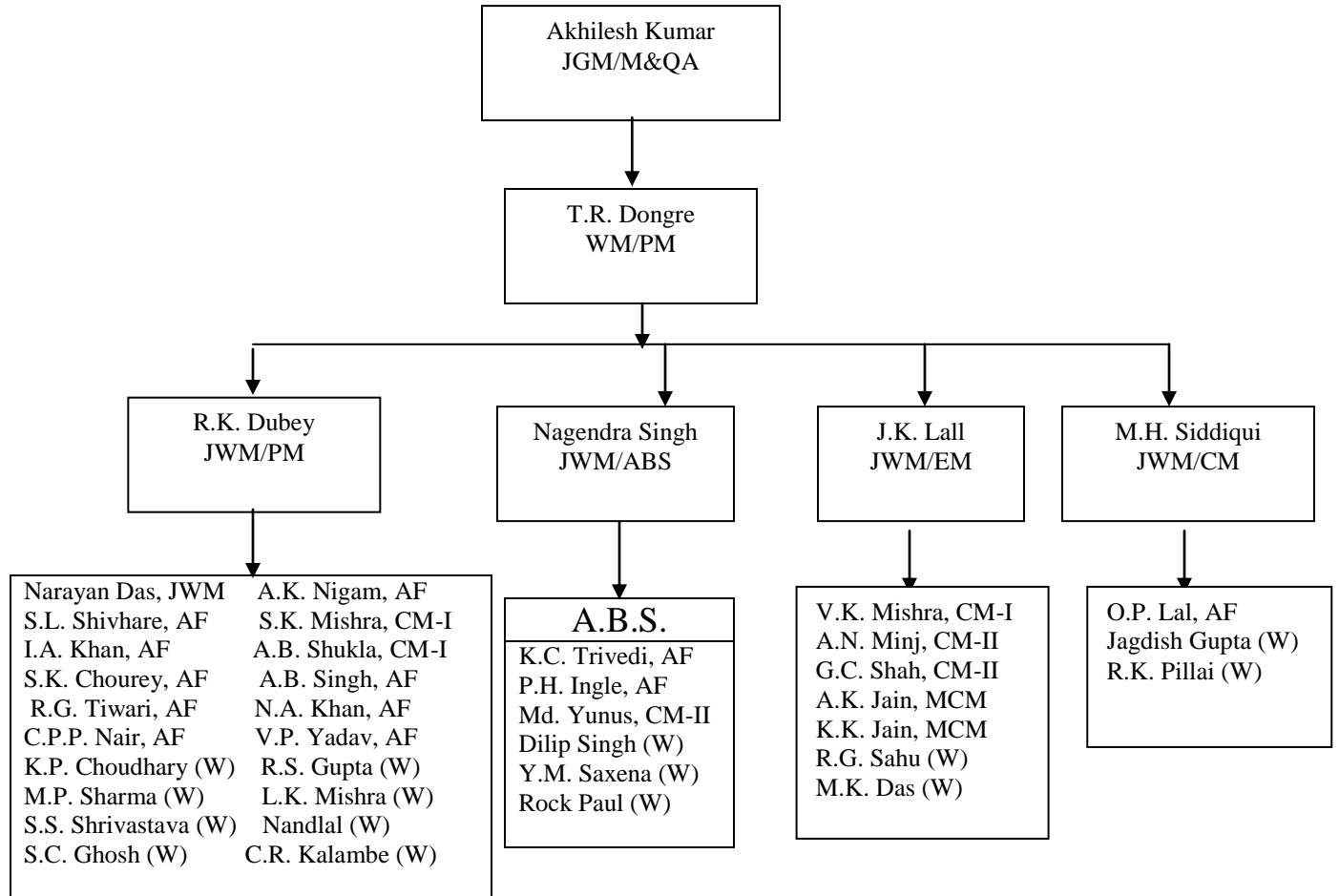


# E.C. CELL FORMATION



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## Small Group Activities - 4



**20(iv) Energy Conservation Achievements**

During the period 2007-08, the unit implemented four nos. energy saving ideas generated through periodic brainstorming session on energy saving. The annual saving of Rs. 59.17 lakhs was achieved with investment of Rs 5,69,990 .

**Projects Impemented**

- 1)  consumption in induction furnaces.

Investment : NIL  
Saving : Rs. 55,50,206 per annum

- 2) Provision of controlling switch (Automatic Timer) in Hot Water Tanks of Phosphating Plants.



Investment : Rs.1000  
Saving : Rs.2,29,635 per annum

- 3) Replacement of 150 Watts HPSV Lamp Fittings by 70 Watts HPSV Lamp fittings in street light/perimeter light



Investment : Rs. 71,500  
Saving : Rs.92,242 per annum

- 4) Replacement of conventional lamps/tube light fitting by energy efficient fluorocent lamps fitting.



Investment : Rs. 4,97,490  
Saving : Rs. 72,083 per annum

<b>ENERGY CONSERVATION PLANS AND TARGETS</b>					
<b>S.NO</b>	<b>DESCRIPTION</b>	<b>SAVING in KWh / Yr.</b>	<b>SAVING in (Rs in Lakhs)</b>	<b>Investment (Rs. In Lakhs)</b>	<b>Project comment &amp; completion year</b>
1	Provision of A.P.F.C. relay in Sub-Station ( 7 nos.)	3,75,912	15,22,443	4.5	2008-09
2	Installation of 100 CFM screw compressor with variable frequency drive in H2A plant	93,225	3.66	8.5	2008-09
3	Replacement of 80W tube light fitting with 70W metal halide lamp fitting	45,428	1.82	2.62	2008-09

## **SAFETY & ENVIRONMENT**

Various initiatives on safety awareness, including safety audit, risk analysis, identification of safety hazards, health check up of all employees and in house training to the employee's conducted in the factory.

Safety and Environment policy in line of SH & E have been made and displayed at various prominent places in the factory for awareness of an employee. 3 tier audit, Section Safety level committee Meeting and Central Safety Meeting chaired by Head of the Organisation is being conducted to identify the safety hazards/accident prone operation/equipment and elimination of the same to bring better control by adapting the best practices and to sustain zero accident.

Eudiometry and air pollution tests are carried out periodically in various product units for minimization of environmental aspects and O.H.S. hazards with the help of structural reviews to steer our on going performance. Special type of protective equipments has been introduced for the betterment of occupational hazard.

Various measures have been taken to avoid the fire hazard like installation of smoke detector system and fire hydrant system. Safety slogan/poster/suggestion competition was conducted during safety month celebration from 01/03/2008 to 31/03/2008.

Total productive Maintenance (TPM) in Plant and Machinery has been adapted by the factory to provide the better working environment and to achieve the target of Zero accident.

## **ENVIRONMENT**

External environment audits through certifying agencies were conducted and various environmental initiatives including environmental monitoring were implemented to maintain the ecological balance in and around the company premises and provide pollution free environment to employees. Adequate numbers of Exhaust Fans and Fume Extractors have been provided in the Plant to provide clean and safe working environment to the Employees